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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,035	08/19/2004	Chien-Ming CHEN	HANP0002USA	5034

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EXAMINER

CHEN, WEN YING PATTY

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/711,035	Applicant(s) CHEN ET AL.	
	Examiner W. Patty Chen	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-13 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some.* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election of Species 1 in the reply filed on Jul. 17, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Response to Amendment

Applicant's Amendment filed Jul. 17, 2006 has been received and entered. Claims 1-14 remain pending in the current application, however, claim 14 is withdrawn from consideration.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2, 4-8 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hou et al. (US 2005/0057716) in view of Wang et al. (US 2004/0263767).

With respect to claim 1: Hou et al. disclose in Figures 7-9 and Paragraphs 0046-0050 a repairing method for a liquid crystal display panel comprising providing pressure to the two opposite surfaces of the liquid crystal display panel (element 310) (Paragraph 0068; wherein external pressure is provided for discharging the excessive liquid crystal), removing a sealant (element 311) in a liquid crystal injection area (element 313); cleaning the pressed-out liquid crystal; sealing the liquid crystal injection area with a fresh sealant (element 314) and curing the fresh sealant (Paragraph 0050).

Hou et al. fail to specifically disclose that pressure is continuously exerted on the substrates when applying the fresh sealant.

However, Wang et al. disclose in Paragraph 0005 a liquid crystal repairing method comprising applying a first, second and third pressure in order to discharge the excess liquid

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crystal and further applying a fourth pressure when applying a sealing, and then remove all pressure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to repair a liquid crystal display panel with the method taught by Hou et al. wherein a pressure is exerted on the substrates of the display panel when applying a sealant post discharging the excessive liquid crystal as taught by Wang et al., since upon releasing the pressure the sealant will be sucked into the opening, thus a reliable sealant can be obtained.

As to claim 2: Hou et al. further disclose in Figures 7-9 that the liquid crystal injection area (element 313) is a liquid crystal injection hole (the liquid crystal injection area is capable of being a liquid crystal injection hole when the liquid crystal dropped onto the substrate is insufficient).

As to claim 4: Hou et al. further disclose in Figures 7-9 that the liquid crystal injection area is a portion of a sealing area of the liquid crystal display panel, and an auxiliary structure (elements 313a, 313b) is formed at an edge of the liquid crystal display panel beside the portion of the sealing area (element 313).

As to claim 5: Hou et al. further disclose that the auxiliary structure is formed by filling a gap of the liquid crystal display panel with an ultraviolet sensitive material and curing the ultraviolet sensitive material (Paragraph 0050, it is obvious that the auxiliary structures are formed the same time as forming the sealing material).

As to claim 6: Hou et al. further disclose in Paragraph 0048 that the liquid crystal display panel is filled up with the liquid crystal utilizing a one-drop-fill method.

As to claim 7: Hou et al. further disclose in Paragraph 0009 that the repairing method is used for repairing an uneven defect on the liquid crystal display panel caused by a gravity issue.

As to claim 8: Hou et al. further disclose in Paragraph 0047 that the step of removing the sealant in the liquid crystal injection area utilizes a laser to burn down the sealant.

As to claims 12 and 13: Both Hou et al. and Wang et al. disclose that pressure is exerted on the substrates for forcing the discharge of the excess liquid crystal, it is thus considered that the exerted pressure on the substrates being the first, second and third pressures, which are equal.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hou et al. (US 2005/0057716) and Wang et al. (US 2004/0263767) in view of Sasaki et al. (US 7086175).

Hou et al. and Wang et al. disclose all of the limitations set forth in the previous claims, but fail to specifically disclose that when providing the first, second and third pressure the temperature is maintained at 20 to 80°.

However, Sasaki et al. disclose in Column 8 lines 6-21 a repairing method of liquid crystal panel in which when providing pressure, the temperature is maintained at 50-80° (which is within the specified range of 20-80°).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to repair a liquid crystal display panel with the method taught by Hou et al. and Wang et al. wherein when providing the first, second and third pressure the temperature is maintained at 50-80° as taught by Sasaki et al., since Sasaki et al. teach that at such temperature makes discharge of the excess of the liquid crystal from the panel assembly easy (Column 8, lines 21-25).

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

None of the prior arts either alone or in combination fairly teach or suggest that a sealant is provided outside the liquid crystal injection hole such that the sealant is removed before providing the first pressure.

Therefore, claim 3 is deemed non-obvious and inventive over the prior arts, thus is allowable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. Patty Chen whose telephone number is (571)272-8444. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

W. Patty Chen
Examiner
Art Unit 2871

WPC
9/20/06


ANDREW SCHECHTER
PRIMARY EXAMINER